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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,873	01/17/2002	Tom Davisson	152/62692-RDK	7903

7590

04/23/2003

Robert D. Katz
Cooper & Dunham LLP
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

COMBS, JANELL A

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 04/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,873

Applicant(s)

DAVISSON ET AL.

Examiner

Janelle Combs-Morillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 12-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-11 and 21-23, drawn to aluminum alloy product, classified in class 420, subclass 548.
 - II. Claims 12-20, drawn to process of casting and working an aluminum alloy, classified in class 148, subclass 551.
2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a materially different process such as extrusion.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Robert Katz on April 7, 2003 a provisional election was made with traverse to prosecute the invention of group I, claims 1-11 and 21-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

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currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

6. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows:

The serial number for the related provisional application filed on January 25, 2001, was not provided in the Declaration filed on April 18, 2002. Additionally, the provisional application must be referenced at the beginning of the specification. See 35 U.S.C. 119(e). Appropriate correction is required.

Claim Objections

7. Claims 9 and 21-23 are objected to because of the following informalities: said claims are dependent on withdrawn process claims. Please rewrite the limitations of said process claims into claims 9 and 21-23. Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 5, 7, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Toma et al (US 4,511,632 A).

Toma teaches an example of an aluminum alloy suitable for fin material for tubes for a heat exchanger (abstract) comprising Mn, Si, Fe, Mg, and Cu in the below mentioned ranges (see Table), which falls within the presently claimed alloy composition. Toma recites that up to 0.5wt% Fe is present. Because Toma teaches a (narrow) range of Fe that overlaps the instant range of Fe “with sufficient specificity” (see MPEP 2131.03), and because Toma teaches an example with the presently claimed ranges of Mn, Si, Mg, and Cu, it is held that Toma anticipates the instant claims. Toma does teach the presence of Zr in said alloy. However, the presently claimed transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). The examiner asserts that the presence of Zr does not materially affect the basic and novel characteristic(s) of the claimed invention. Therefore, the rejection is deemed proper.

Concerning dependent claims 5 and 7, the Fe as well as Mn+Fe range taught by Toma significantly overlaps the presently claimed range. Therefore, the overlap is held to be “with sufficient specificity” (see MPEP 2131.03).

Concerning dependent claims 10 and 11, Toma teaches an aluminum alloy suitable for fin material for a heat exchanger (abstract).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-11, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sircar (US 5,976,278 A).

Sircar teaches an aluminum alloy as seen in the Table below (see Sircar at claim 1, etc), wherein said aluminum alloy is typically used as tubing, fin stock, or foil for packaging (column 7 lines 30-31). Sircar teaches no Mg is present in examples A-K in Table 1. Sircar does teach the presence of Ti in said alloy. However, the presently claimed transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). The examiner asserts that the presence of Ti does not materially affect the basic and novel characteristic(s) of the claimed invention. Sircar teaches that said Al-Mn-Fe-Si alloy exhibits improved combinations of corrosion resistance and hot formability (column 2 lines 49-52). Sircar teaches that Mg is believed to adversely impact certain brazing operations, and is optionally held to be preferably less than 0.1% (column 3 lines 24-26).

	Si	Fe	Mn	Cu	Mg	Zn	aluminum
instant claim 1	0.25-0.60	0.15-0.50	0.20-0.70	-0.05	-0.05		balance
2						0.1	
3						0.5-2.0	
4	0.3-0.5						
5		0.15-0.35					
6			0.30-0.60				
7		0.40-0.80 Mn+Fe					
Sircar	-0.5	-0.5	0.1-1.5	-0.03	-1	0.06-1	
Toma, ex. 2	0.26	up to 0.5	0.25	-	-	up to 0.02	balance
Toma broad	0.1-0.8	up to 0.5	0.1-0.5	-	-	-	balance

Because Sircar teaches a substantially overlapping alloy composition, complete with motivation to select the presently claimed narrow ranges of Cu and Mg, it is held that Sircar has created a prima facie case of obviousness of the presently claimed invention. Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05, *In re Best* 195 USPQ 430, *In re Malagari*, 182 USPQ 549, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir 1985), *In re Woodruff*, 16 USPQ 2d 1934, and *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

Concerning dependent claims 2-7, Sircar teaches an overlapping alloy composition as seen in the Table above.

With regard to the process steps of product by process claims 8, 9, 21-23, it is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See MPEP 2113, *In re Brown* (173 USPQ 685) and *In re Fessman* (180 USPQ 524) *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Because applicant has not shown that the product taught by the prior art is materially different from the presently claimed product by process, the rejection is deemed proper.

Concerning dependent claims 10 and 11, as stated above, Sircar teaches said aluminum alloy is typically used as tubing, fin stock, or foil for packaging (column 7 lines 30-31).

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12. Claims 4, 6, 8, 9, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toma et al (US 4,511,632 A).

Concerning claims 4 and 6, Toma teaches an aluminum alloy suitable for fin material for tubes for a heat exchanger comprising Mn, Si, Fe, Mg, and Cu in the above mentioned ranges (see Table), which overlap the presently claimed alloying ranges. Because of the overlap, it is held that Toma has created a prima facie case of obviousness of the presently claimed invention. Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05.

With regard to the process steps of product by process claims 8, 9, 21-23, it is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See MPEP 2113. Because applicant has not shown that the product taught by the prior art is materially different from the presently claimed product by process, the rejection is deemed proper.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs- Morillo whose telephone number is (703) 308-4757. The examiner can normally be reached Monday through Friday from 7:30am to 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



GEORGE WYSZOMIERSKI
PRIMARY EXAMINER

jcm 

April 10, 2003